K. R. RAJBHANDARI*: **The genus *Agrostis* in Nepal** (2)**

K. R. ラジバンダリ*: ネパール産ヌカボ属 (2)

In the part (1) of this paper I have described the seven of the twelve species of *Agrostis* known from Nepal. In this paper I will describe the four remaining species and a note on the abnormal spikelets found in two species and I will also record all the additional specimens of the species described in the part (1). All the specimens examined are deposited in the Herbaria of the University of Tokyo (TI) and Department of Medicinal Plants, Nepal (KATH).

8) **Agrostis triaristata** (Hook. f.) Bor, Grass. Ind. 391 (1960)—Hara et al., Enum. Fl. Pl. Nepal 1: 121 (1978). 〔Fig. 5(4)〕

Deyeuxia triaristata Hook. f., Fl. Brit. Ind. 7: 266 (1896).

An annual grass. Culms slender, 12–60 cm long, suberect or geniculately ascending from a slender creeping base, green, usually with 2–3 dark brown nodes. Leaf-sheaths split to the base, terete, striate, green, smooth. Ligule 3–7 mm long, linear, membranous, smooth, apex pointed. Blade 4–16 cm long, 2–5 mm broad, linear, acuminate, flat, green, smooth or scaberulous, margin scaberulous. Panicle 5–16 cm long, 1–8 cm broad, pyramidal or elliptic, branches and pedicels capillary, spreading, scaberulous. Spikelets 4.5–5.5 mm long, 0.8–1 mm broad, linear, pale-green or sometimes purplish, shining. Lower glume 4–5.5 mm long, 1.2–1.5 mm broad when flattened, lanceolate, acuminate, smooth, 1-nerved, minutely scabrid on the upper part of the nerve. Upper glume 4.2–5 mm long, 1–1.2 mm broad when flattened, lanceolate, acuminate, smooth, 1-nerved, scabrid on the upper part of the nerve. Lemma 3 mm long, 1.3 mm broad when flattened, oblong, membranous, 5-nerved, two lateral nerves produced into about 1 mm long awns, two intermediate nerves produced into mucros; median awn 6–7.5 mm long, scabrid, exserted from the glumes, arising in between basal and middle part. Callus hairy, hairs up to 1 mm long. Rhachilla

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0.4 mm long, penicillate. Palea 2.2–2.5 mm long, 0.6 mm broad, hyaline, 2-nerved, minutely scaberulous on the upper part of the nerve; apex fimbriate, lobed. Lodicules 0.7 mm long, linear, acuminate, hyaline. Anther 0.5–0.7 mm long. Fruit 1.3 mm long, 0.6 mm broad, elliptic, smooth.

Habitat: On moist places or on the shady mossy ground of the forest in the subalpine or alpine region.

Distribution: E. Himalaya (Nepal, Sikkim).

Specimens examined: Nepal. Dolakha District, Thang Dingma-Chhumigaljo, 3350 m (Rajbhandari 9798); Bhitte Kharka-Patlo Pokhari, 3900 m (Rajbhandari 10111, 10140); Beding-Nangaon, 3800 m (Rajbhandari 9851); Janakpur Zone, Ramechhap Distr., Koshing Kharka-Thare Og, 3800 m (Ohba et al. 60532); Sagarmatha Zone, Solukhumbu District, Sete-Taktor, 3000 m (Ohba et al. 61439, 61454); Beni Kharka-Sarkari Pati, 3700 m (Ohba et al. 61904, 61923); Pike Dongshar-Namikhil, 3500 m (Ohba et al. 62218, 62220, 62221); Pike Bhanjyang-Pike Dongshar, 3600 m (Ohba et al. 62120, 62140, 62148); Sarkari Pati-Beni, 3200 m (Ohba et al. 62032).

This species is fairly common on the shady places of the subalpine forests in Central and East Nepal. It is easily distinguished from the others by the smooth lemma with exserted awn and lateral and intermediate nerves extending into awns and mucros and hairy callus and rhachilla. The spikelets in our specimens are only 4.5–5.5 mm long even though Hooker (1896) described them as 6 mm long. Its nearest related species seems to be *Agrostis wardii* Bor from Manipur, India which has lemma with four setae from the truncate tip and awned from the base (Bor 1960), but in this species the rhachilla is absent, while in *A. triaristata* it is present and penicillate.

9) **Agrostis hookeriana** C. B. Clarke ex Hook. f., Fl. Brit. Ind. 7: 256 (1896)—Bor, Grass. Ind. 387 (1960)-Hara et al., Enum. Fl. Pl. Nepal 1: 120 (1978). 〔Fig. 5(3)〕

Agrostis poluninii Bor in Kew Bull. **1953**: 269 (1953).

An annual grass. Culms slender, 30–45 cm long, erect or slightly geniculate below, with usually 2 brown nodes. Leaf-sheaths split nearly to the base, terete, striate, smooth or minutely scaberulous, close-fitting, green. Ligule about 2.5 mm long, oblong, obtuse, membranous, smooth. Blade linear, 3–15 cm long, 0.6–2 mm broad, flat, green, abaxial surface smooth or minutely scaberulous, adaxial surface and margin scabrid. Panicle 4–12 cm long, 0.5–5 cm broad,

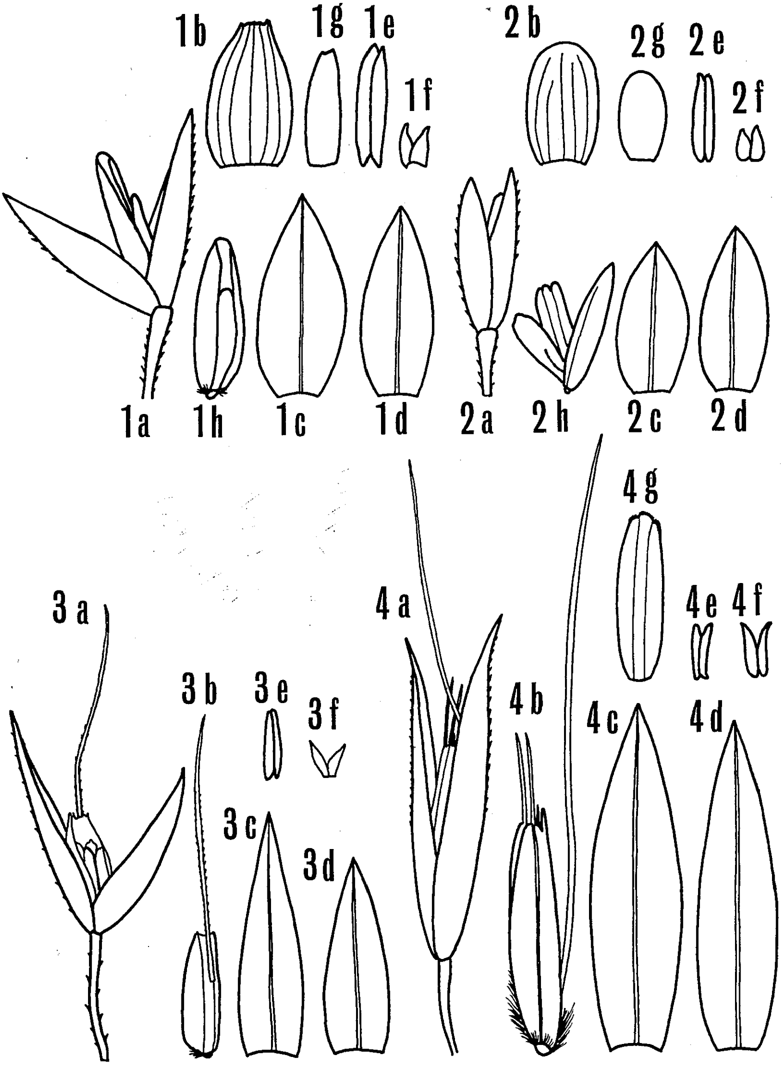

Fig. 5. Spikelets, bracts and anthers of *Agrostis*. 1. *A. gigantea* (Rajbhandari 8586). 2. *A. stolonifera* (Rajbhandari & Malla 6447). 3. *Agrostis hookeriana* (Rajbhandari & Roy 1960). 4. *A. triaristata* (Rajbhandari 9851). a. Spikelet. b. Lemma. c. Lower glume. d. Upper glume. e. Anther. f. Lodicules. g. Palea. 1h. Lemma and palea. 2h. Lemma, palea and anther. All ×10.

pyramidal or linear, branches capillary, spreading, axis smooth, branches and pedicels scabrid. Spikelet 3-3.5 mm long, 0.8-1.2 mm broad, lanceolate, green or dark purple. Lower glume 3-3.5 mm long, 0.9-1 mm broad when flattened, lanceolate, acuminate, smooth, green or dark purple, 1-nerved, nerve scabrid; upper glume as the same as the lower, but slightly shorter. Lemma 1-1.5 mm long, 0.8-1 mm broad when flattened, broadly ovate, truncate, denticulate, membranous, smooth, greenish-purple or green, 5-nerved; awned, awn exserted from the glumes, arising just above middle, 3.5-5 mm long, scabrid. Palea absent. Lodicules 0.5 mm long. Callus minutely hairy. Anther 0.6-0.9 mm long, linear.

Habitat: On moist grassy slopes or moist ground as well as on open grassy slopes of the subalpine and alpine regions.

Distribution: E. Himalaya (Nepal, Sikkim).

Specimens examined: C. Nepal. Dolakha District, Beding-Demdem, 3500 m (Rajbhandari & Roy 1960); Ramechhap Distr., Thare Og-Neju, 3900 m (Ohba et al. 60886); Neju-Pasinge Kharka, 3700 m (Ohba et al. 61022); Neju, 3600 m (Ohba et al. 61015).

This species is distinguished from the others by the long-awned glabrous lemma, the almost naked callus and the absence of palea. In this species the colour of the spikelet varies from green to purple and the glumes are sometimes narrowly lanceolate. This species seems to be related to *A. filipes* Hook. f. from Khasi Hills, India having anthers less than 1 mm long and awn inserted on the middle or above middle of the back of lemma. The latter is described as having dense panicle and about 2.5 mm long acute glumes (Bor, 1960) while the former has usually effuse or open panicle and 3-3.5 mm long acuminate glumes.

Bor (1953) described *Agrostis poluninii* from Central Nepal and noted that the widely gaping spikelets, the very unequal glumes and the long acuminate upper glume in particular, separated it quite easily from other species. In this species the lower glume is 1.5-2.5 mm long and the upper one is 3-3.5 mm long (Bor 1953), otherwise all other characters (lemma 1.5 mm long, palea absent, anther 0.5-0.75 mm long) are similar to *Agrostis hookeriana* so that Bor (1960) reduced *A. poluninii* into the synonymy of *A. hookeriana*, which I also agree.

10) **Agrostis sikkimensis** Bor in Kew Bull. **1954**: 502 (1954).

A. divaricata Griseb. in Goett. Nachr. 82 (1868)—Hook. f. in Fl. Brit. Ind.

7: 258 (1896).

This species seems to be rare in Nepal. It is collected by Richards from central Nepal and is listed by Hara et al. (1978). According to Bor (1960) this species is characterised by its dwarf habit and having capillary leaves, 1.75 mm long spikelets and unequal glumes.

11) **Agrostis gigantea** Roth, Fl. Germ. 1: 31 (1788)—Bor, Grass. Ind. 387 (1960)—Hsu in Hara, Fl. E. Himal. 349 (1966)—Hara et al., Enum. Fl. Pl. Nepal 1: 120 (1978). 〔Fig. 5(1)〕

A perennial rhizomatous grass. Culms erect or geniculate at base, 16–42 cm long, green or purplish below the panicle, smooth, with 3–4 brown or dark purple nodes. Leaf-sheaths split to near the base, terete, striate, smooth or scaberulous, close-fitting, green or purple. Ligule 2–4 mm long, rounded, membranous, scaberulous. Blade 3–6.5 cm long, 2–4 mm broad, linear, acuminate, usually grey-green or green, often scabrid on both surfaces, flat. Panicle 9–15 cm long, 0.5–5 cm broad, erect, pyramidal or cylindrical, spreading; rhachis scaberulous, purple or green; branches and pedicels scabrid, pedicels 2–7 mm long. Spikelets 2.2–2.7 mm long, 0.7 mm broad, lanceolate. Lower glumes 2.2–2.7 mm long, 0.9 mm broad when flattened, upper ones 2–2.5 mm long, 0.8 mm broad when flattened, lanceolate, acute, green or purple, 1-nerved, keel scabrid. Lemma 1.5–1.9 mm long, 0.9 mm broad when flattened, broadly ovate, truncate, 3- or 5-nerved, intermediate nerves indistinct in 5-nerved lemma. Callus smooth. Palea 1–1.2 mm long, hyaline. Lodicules 0.4 mm long. Anthers 1.2 mm long, yellow.

Habitat: On the bank of the river or open sandy places in the upper temperate and subalpine regions.

Distribution: Europe and temperate Asia.

Specimens examined: Nepal. Mugu District, Rara, 2900 m (Rajbhandari & Roy 3688); Manang District, Bhraka-Humde, 3400 m (Rajbhandari 8813); Khangsar Khola, 3500 m (Rajbhandari 8586).

This species occupies rather open habitat and is found on sandy places in arid regions of Central Nepal. This species is characterised by the presence of rhizome, palea more than half the lemma and anther more than 1 mm long. It is related to *A. stolonifera* L. but distinguished by the presence of rhizome.

12) **Agrostis stolonifera** L., Sp. Pl. 62 (1753)—Bor, Grass. Ind. 390 (1960)—Hara et al., Enum. Fl. Pl. Nepal 1: 120 (1978). 〔Fig. 5(2)〕

Agrostis alba auct. non L. Hook. f., Fl. Brit. Ind. 7: 254 (1896).

A perennial stoloniferous grass. Culms up to 90 cm long, geniculate-erect, frequently rooting at the lower nodes, green, smooth, with 3-5 dark purple nodes. Leaf-sheaths split to near the base, terete, striate, smooth, rather loose-fitting, green. Ligule 4-4.5 mm long, oblong, rounded, membranous, scaberulous. Blade up to 20 cm long, 5 mm broad, flat, pale to green, both surfaces scabrid. Panicle up to 30 cm long, 4 cm broad, erect, pyramidal or cylindrical; rhachis smooth, green, branches and pedicels scabrid, pedicel 1-3 mm long. Spikelets 2.1-2.6 mm long, lanceolate. Lower glumes 2.1-2.6 mm long, 1.2 mm broad, upper ones 2-2.5 mm long, 0.9 mm broad, broadly or narrowly lanceolate, acute, green, brown or purple, 1-nerved, keels scabrid. Lemma 1.7-2 mm long, 0.9-1.1 mm broad when flattened, broadly ovate, truncate, toothed, membranous, 5-nerved, sometimes mid-nerve extended into minute awn below apex. Palea 1.1-1.5 mm long, membranous. Callus smooth or sometimes minutely hairy. Lodicules 0.6 mm long, hyaline. Anthers 1-1.2 mm long, yellow.

Habitat: On open grassland in the temperate region.

Distribution: Europe, temperate Asia, N. America and elsewhere introduced.

Specimens examined: Nepal. Baglung District, Nisyaldhor, 2550 m (Rajbhandari & Malla 6447); Dolakha District, Jiri, 1890 m (Rajbhandari & Roy 2088).

This is one of the widely distributed species but in Nepal it does not seem to be so common. The size of the floral parts is variable and awned and unawned lemmas are found in the same specimen.

A note on abnormal spikelets in two species of *Agrostis*

In some specimens of *Agrostis nervosa* and *Agrostis pilosula* abnormal spikelets were found. (Fig. 6). These specimens were collected at Chakhure Lekh in West Nepal at 3600 m in altitude. It is very interesting that both of them occurred in the same locality. No other such abnormality in *Agrostis* was recorded from Nepal. The abnormality may have been caused by parasitic nematodes found inside the ovary. The ovaries in these abnormal spikelets are dark brown and enlarged into various shapes, cylindrical, ovate or obovate. The paleas, lodicules and anthers are absent in the abnormal spikelets while all of them are well developed in the normal spikelet occurring in the same branch with the abnormal spikelet. Many sterile spikelets are found in each specimen. In the genus *Agrostis* Philipson (1935) already reported abnormality of *A.*

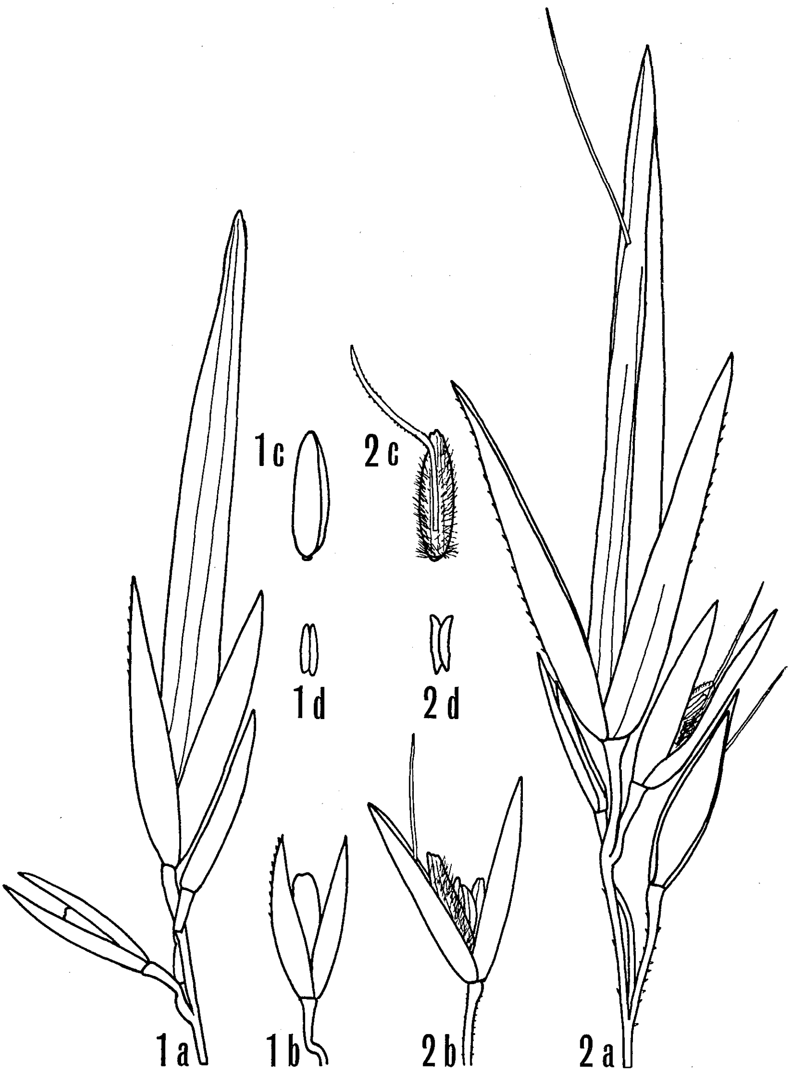

Fig. 6. Branch of inflorescence, spikelets, lemma and anther of *Agrostis*. 1. *A. nervosa* (Rajbhandari & Roy 4451B). 2. *A. pilosula* (Rajbhandari & Roy 4451A). a. Branch of inflorescence with normal and abnormal spikelets. b. A normal spikelet. c. Lemma of normal spikelet. d. Anther of normal spikelet. All ×10.

stolonifera. In that case the ovary was thought to be infected by nematodes. Philipson wrote: 'the outstanding effects of the nematodes are the enlargement of the glumes, usually unequally, so that the inner becomes the longer; the lengthening of the lemma together with an increase in the number of its nerves; and the development of the ovary into a spindle-shaped purple gall, in

Tab. 2. Different characters of the normal and abnormal spikelets of *Agrostis nervosa* and *A. pilosula*.

Character	*Agrostis pilosula* (Rajbhandari & Roy 4451A)		*Agrostis nervosa* (Rajbhandari & Roy 4451B)	
	normal spikelet	abnormal spikelet	normal spikelet	abnormal spikelet
Length of lower glume (mm)	2.7-3	4-6.5	1.9-2.5	3.9-5
Number of nerve on lower glume	1	1 or 3	1	1 or 3
Length of upper glume (mm)	2.5-2.7	2.7-6	1.8-2.2	3.8-4.5
Number of nerve on upper glume	1	1 or 3	1	1 or 3
Length of lemma (mm)	1.6-1.8	5.8-10	1.4-1.7	6-8.4
Surface of lemma	hairy	glabrous	glabrous	glabrous
Number of nerve on lemma	5, hairy	7 or 9, smooth or scabrid	5	7
Lemma awned or not	awned	awned or some unawned	not awned	not awned
Awn inserted on back of lemma	below middle	above middle		
Length of palea (mm)	1.3	palea absent	palea absent or very small	palea absent
Length of anther (mm)	0.8	anther absent	0.5-0.7	anther absent
Lodicules	present	absent	present	absent
Callus	hairy	glabrous	glabrous	glabrous

which the parasites are to be found'. The differences of the normal and abnormal spikelets of these two species are given in Tab. 2.

Additional specimens of the species described in part (1)

1) *Agrostis inaequiglumis* Griseb.

Nepal. Rasua District, Gosainkunda, 4300 m (Rajbhandari, Sharma & Kayastha 10503) ; Dolakha Distr., Patlo Pokhari, 4100 m (Rajbhandari 10244) ; Pam Khola, 4200 m (Rajbhandari 10091) ; Janakpur Zone, Ramechhap Distr., Thare Og-Neju, 4100-4450 m (Ohba et al. 60906, 60933) ; around Thare Og, 4000 m (Ohba et al. 60628) ; Koshing Kharka-Thare Og, 3850 m (Ohba et al. 60542, 60548) ; Sagarmatha Zone, Solukhumbu Distr., Pike Bhanjyang-Pike Dongshar, 3900 m (Ohba et al. 62130) ; Beni Kharka-Yurigolcha, 4700 m (Rajbhandari 61704) ; Thosa Kharka-Beni Kharka, 3700 m (Ohba et al. 61640) ; Pike Dongshar-Namikhil, 3500 m (Ohba et al. 62223) ; below Dudhkund-east of Dudhkund, 4500 m (Rajbhandari 61820) ; Beni Kharka-Sarkari Pati, 3850 m (Ohba et al. 61932) ; Loding-Pike Bhanjyang, 3500 m (Ohba et al. 62078, 62079) ; Sarkari Pati-Beni, 3100 m (Ohba et al. 62013).

2) *Agrostis micrantha* Steudel

Nepal. Janakpur Zone, Dolakha District, Jiri-Shivalaya, 2100 m (Ohba, Wakabayashi & Rajbhandari 61334, 61335, 61338) ; Shivalaya-Jiri, 2000-2100 m (Ohba et al. 61313, 62289) ; Ramechhap Distr., Patkare-Bhandar, 2200 m (Ohba et al. 61267) ; Shivalaya-Bhandar, 2450 m (Ohba et al. 61360) ; Bhandar-Sete, 1600 m (Ohba et al. 61385) ; Neju-Choarma, 2700 m (Ohba et al. 61097) ; Namikhil-Bhandar, 2300 m (Ohba et al. 62269) ; Sagarmatha Zone, Solukhumbu Distr., Sarkari Pati-Beni, 2500-2800 m (Ohba et al. 61951, 61990) ; Taktor-Mopung, 2900 m (Ohba et al. 61519) ; Sete-Taktor, 3000 m (Ohba et al. 61453).

3) *Agrostis munroana* Aitch. & Hemsley

Nepal. Manang Distr., Pisang-Bhratang, 3000 m (Rajbhandari 8892) ; Sagarmatha Zone, Solukhumbu Distr., Mopung-Thosa Kharka, 3400 m (Ohba et al. 61543) ; around Pike Dongshar, 3700 m (Ohba et al. 62164, 62166).

4) *Agrostis myriantha* Hook. f.

Nepal. Myagdi District, Ghodepani-Sikha, 2700 m (Rajbhandari 7721) ; Dolakha District, Thingsang Danda, 9000 ft (Shakya, Rajbhandari & Sainju 2795) ; Nigale-Surke, 2200 m (Rajbhandari & Roy 1113) ; Sekpa, above Simigaon, 2500 m (Rajbhandari & Roy 1570) ; Gyalche Kharka-Thang Dingma, 3000 m (Rajbhandari 9657) ; Jiri-Shivalaya, 2100 m (Ohba et al. 60009) ; Janakpur Zone, Ramechhap District, Shivalaya-Deorali, 2100 m (Ohba et al. 60068) ; Neju-Choarma, 3550 m (Ohba et al. 61096, 61121) ; Deorali-Serdingma, 2800 m (Ohba et al. 60091, 60095) ; Shivalaya-Bhandar, 2350 m (Ohba et al. 61365) ; Sagarmatha Zone, Solukhumbu Distr., Sarkari Pati-Beni, 3200 m (Ohba et al. 62030) ; Pike Dongshar-Namikhil, 3500 m (Ohba et al. 62208).

5) *Agrostis nervosa* Nees ex Trin.

Nepal. Jumla District, Chakhure Lekh, 3600 m (Rajbhandari & Roy 4451B, abnormal spikelet) ; Dolakha Distr., Beding-Nangaon, 3900 m (Rajbhandari 9855) ; Patlo Pokhari, 4100 m (Rajbhandari 10241) ; Chhumigaljo, 3500 m (Rajbhandari 9751) ; Bhitte Kharka-Patlo Pokhari, 3800 m (Rajbhandari 10161) ; Patlo Pokhari-Phedi Kharka, 3000 m (Rajbhandari 10229) ; Chhumigaljo-Beding, 3500 m (Rajbhandari & Roy 1765) ; Kalinchok, 11000 ft (Shakya, Rajbhandari & Sainju 2780) ; Janakpur Zone, Ramechhap Distr., Thodung 3000 m (Rajbhandari & Roy 2161) ; Thare Og-Neju, 4200 m (Ohba et al. 60861) ; Sagarmatha Zone, Solukhumbu Distr., Beni Kharka-Sarkari Pati, 3400-3850 m (Ohba et al. 61897, 61911, 61933) ; Pike Dongshar-Namikhil, 3500 m (Ohba et al. 62215) ; Mopung-Thosa Kharka, 2900 m (Ohba et al. 61554) ; below Dudh Kund-Beni Kharka, 4100 m (Rajbhandari 61809) ; Pike Bhanjyang-Pike Dongshar, 3800 m (Ohba et al. 62109, 62116, 62121, 62139) ; Loding-Pike Bhanjyang, 3400 m (Ohba et al. 62082, 62085) ; Beni Kharka-Thaldarbug, 4000 m (Rajbhandari 61722) ; Thosa Kharka-Beni Kharka, 3900 m (Ohba et al. 61634, 61570, 61624) ; Sete-Taktor, 3400 m (Ohba et al. 61446, 61448) ; Sarkari Pati-Beni, 3200 m (Ohba et al. 61950, 62028).

6a) *Agrostis pilosula* Trin. var. *pilosula*

Nepal. Jumla District, Chakhure Lekh, 3600 m (Rajbhandari & Roy 4451A, abnormal spikelet) ; Sallyan District, Jimali, 1400 m (Rajbhandari & Roy 4803) ; Dolpa District, Rangagaon, Thuli Bheri, 2300 m (Rajbhandari & Malla 6702) ; Suligad, 2700 m (Rajbhandari & Malla 6915) ; Myagdi District, Muna Gaon, 1850 m (Rajbhandari & Malla 6357A) ; Makwanpur District, Kuna Khola, 5700 ft (Rajbhandari, Amatya & Bhusal 75-869) ; Dolakha District, Patlo Pokhari-Phedi Kharka, 2700 m (Rajbhandari 10176) ; Janakpur Zone, Ramechhap District, Koshing Kharka-Thare Og, 3650-3850 m (Ohba et al. 60589, 60601) ; Sagarmatha Zone, Solukhumbu District, Sarkari Pati-Beni, 2500 m (Ohba et al. 61980) ; Pike Bhanjyang-Pike Dongshar, 3700 m (Ohba et al. 62145) ; Thosa Kharka-Beni Kharka, 3800-4000 m (Ohba et al. 61638, 61639) ; Beni Kharka-Sarkari Pati, 3800 m (Ohba et al. 61925) ; Namikhil-Bhandar, 2100 m (Ohba et al. 62251) ;

Beni-Loding, 2500 m (Ohba et al. 62048, 62061, 62067).

6b) *Agrostis pilosula* var. *wallichiana* (Hook. f.) Bor

Nepal. Manang District, Tilicho Phedi, 4000 m (Rajbhandari 8700) ; Phedi, 4400 m (Rajbhandari 8389) ; Janakpur Zone, Ramechhap District, Thare Og-Neju, 4100 m (Ohba et al. 60905) ; Thare Og-Thare Teng, 4000 m (Ohba et al. 60664) ; Baula Pokhari-Chhu Ningma, 4000 m (Ohba et al. 60271) ; Botase Kharka-Koshing Kharka, 4000 m (Ohba et al. 60477) ; Chhu Ningma-Jata Pokhari, 4000 m (Ohba et al. 60290) ; Thare Og-Neju, 4200 m (Ohba et al. 60862) ; around Thare Og, 4000 m (Ohba et al. 60627) ; Sagarmatha Zone, Solukhumbu District, Beni Kharka-Yurigolcha, 4300 m (Rajbhandari 61691, 61694) ; Mopung-Thosa Kharka, 2900 m (Ohba et al. 61555).

7) *Agrostis zenkeri* Trin.

In this species I observed that the size of the plant varies among populations in different habitats. On open slope in the temperate region the plant is smaller but on the moist places of the subalpine region I found plants up to 1.2 m high and inflorescence 26 cm long.

Nepal. Gyalche Kharka-Thang Dingma, 3100 m (Rajbhandari 9745) ; Janakpur Zone, Ramechhap Distr., Choarma-Kyama, 2400 m (Ohba et al. 61167) ; Shivalaya-Bhandar, 2550 m (Ohba et al. 61357) ; Jiri-Shivalaya, 2100-2200 m (Ohba et al. 60010, 60023) ; Shivalaya-Deorali, 2100 m (Ohba et al. 60065) ; Sagarmatha Zone, Solukhumbu District, Loding-Pike Bhanjyang, 3100 m (Ohba et al. 62094) ; Mopung-Thosa Kharka, 3000 m (Ohba et al. 61546) ; Taktor-Mopung, 2800-2900 m (Ohba et al. 61502, 61518) ; Beni-Loding, 2400 m (Ohba et al. 62069) ; Beni Kharka-Sarkari Pati, 3400 m (Ohba et al. 61900) ; Sarkari Pati-Beni, 2800 m (Ohba et al. 61944, 61946).

Correction: The scale of all sketches of figures no. 2, 3 & 4 in the part (1) of this paper is ×15.

References

Björkman, S. O. 1960. Studies in *Agrostis* and related genera. Symb. Bot. Upsal. **17**: 1-112. Bor, N. L. 1953. Notes on Asiatic grasses: XII. New species. Kew Bull. **1953**: 269-276. —— 1954(a). Notes on Asiatic grasses: XVII. The species of *Agrostis zenkeri* Trin. Kew Bull. **1954**: 441-442. —— 1954(b). Notes on Asiatic grasses: XVIII. Indian species of *Agrostis* collected by Royle. Kew Bull. **1954**: 453-460. —— 1960. The grasses of Burma, Ceylon, India

and Pakistan (excluding Bambuseae). Pergamon Press, London. Hara, H. et al. 1978. An Enumeration of the flowering plants of Nepal Vol. 1. British Museum (Natural History), London. Hooker, J.D. 1896. Gramineae. *In* Fl. Brit. Ind. Vol. 7. L. Reeve & Co. Philipson, W.R. 1935. Abnormal spikelets in the genus *Agrostis* Linn. Journ. Bot. 73: 65–75. Widén, K.-G. 1971. The genus *Agrostis* in eastern Fennoscandia. Taxonomy and distribution. Flora Fennica 5, Helsinki.

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本報はネパール産ヌカボ属についての第2報で，4種について記載した。*Agrostis nervosa* と *A. pilosula* に見出されたネマトーダによると推定される異常な形態をした小穂についても記述を行った。また，前報で取扱った種で，その後に検討した標本を挙げ，分布情報の充実に努めた。

□富山市科学技術センター（太田道人 編著）：**進野久五郎植物コレクション**（富山市科学技術センター収蔵資料目録第1号）222 pp. 1987. 非売品. 富山県の植物研究家として知られる進野久五郎氏(1900〜1984)は，晩年採集標本を富山市科学技術センターに寄贈された。同センターは学芸員太田道人氏を中心にその同定・整理を行う一方，大型計算機によるデータベース化を行ったうえ，このたび目録に作成した。科は分類順配列で，種子植物は大井(1983)新日本植物誌に従っている。種の配列は学名のＡＢＣ順で，学名，和名を併記する。標本の引用はすべて県からはじまる産地名，採集者，年月日(略記)，標本番号が記されている。巻末に和名索引がある。本書は6640点の進野コレクションを，分類順配列を含めて完全な電算機処理により目録としたもので，画期的な業績である。現在多くの機関や個人で電算機利用の資料整理が試みられているが，まだ十分満足できる出力を得るには至っていなかったので，その手法には学ぶべき点が多いだろう。センターが比較的後発であったため，機器の進歩と自然誌資料計算機処理の予備知識の蓄積がマッチしたこと，大型機を直接利用したこと，標本量が手頃だったことなどが成功の理由として考えられるが，同定や標本整理，データ作成のための背後の努力も無視できない。富山市科学技術センターではすべての資料を同様にデータ化しているとのことであるが，他分野の成果にも注目したい。ひとつ気になるのは，採集者が進野氏の場合は省略してあることで，これは今後多くの人の資料が加わるとわからなくなるおそれがある。データとしては手が打たれていると思うが，老婆心でつけ加える。　(金井弘夫)